APPROVAL SPECIFICATIONS

DC插座

Product Model. DC-470-1-2.1-351

Customer's Part NO.

Customer's Model:

Customer's Approval Requested.

Please return this copy as a certification of your approval.

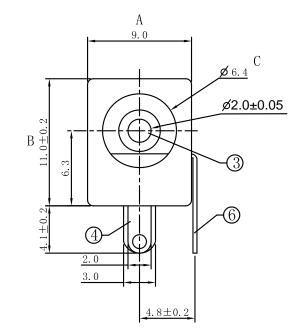
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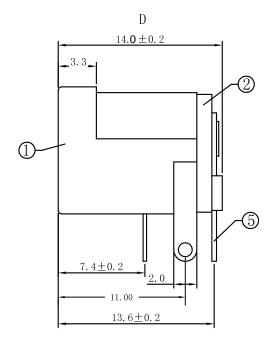
Approved by: Date:

APPROVE	REVIEW	POLT		
黄崇武	卢娇娇	孙 斌		

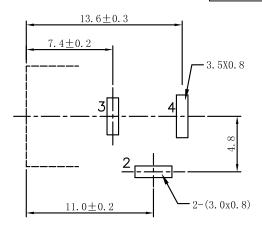
深圳市港源微键技术有限公司

<u>SCHEMATIC</u>





P.C.B LAYOUT TOP VIEW



PIN	ø1.65	ø2.0	ø2.35	ø2.5
APPD	•			

					TOLERANCE								
					UNLESS SPECIF	FIED							
6	CURVE PIECE	1	H62 BRASS	Ag-Plating			1						
5	FLAT PIECE	1	H62 BRASS	Ag-Plating			NO	DATE		REVISIO		BY	APPD
4	SPRING	1	SUS 301	Ag-Plating	TITLE: DC POWER JACK				<u>T : MM</u>		DWN		
3	PIN	1	H59 /H62 BRASS	Ni-Plating	PART NO :DC-470-1-2.1	1-351 /	DC-	005 SCA	LE:1:1				
2	COVER	1	PBT		深圳市港源微	<u></u> 數键	はっ	おちね	ショ	7	APPD		
1	HOUSING	1	PBT									GL: 🗁 🕀	
NO.	DESCRIPTION	QTY	MATERIAL	PLATING	Shenzhen Gangyuan M	MICIO	ĸey	Iecnnolo	gy Co	., Ltd.		μ. μ. ψ	

		SPECIFICATION				
RIPT		DATE				
MOI	名称: DC POWER JACK 日期: 2016年 4 月10 日 MODEL NO. DC-470-1-2.1-351					
	ING (额定值):	DC 30V 0.5A				
PRA TEM RAN	CTICAL IPERATURE	-16~65°C 在-16°C~+65°C温度内使用				
ATM CON 测试	NDARD OSPHERIC DITIONS 标准状度	UNLESS OTHERWISE SPECIFIED THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS AND TESTS ARE AS FOLLOWS: (1) BETWEEN BODY AND CONDUCTOR: 5°C TO 35℃ (2) BETWEEN CONDUCTORS NOT TO BE CONTACT: 45% T (3) PRESSURE: 86Kpa TO 106Kpa 在没有指定的情况下测试温度、湿度、气压如下: (1) 温度为 5℃~35℃ (2) 湿度为 45%~85% (3) 气压为 86 Kpa~106Kpa	ГО 85%			
MEC	HANICAL(机械	生能)				
	ITEM 项目	TEST CONDITIONS 测试条件	PERFORMANCE 规格			
1	CONNECTION FORCE 插入力度	MEASUREMENT SHALL BE MADE AFTER CONNECTING AN DISCONNECTING USING STANDARD PLUG GAUGE 3 TIMES 依据标准的 PLUG GAUGE 做第 3 次拔插后测定				
	DISCONNECTI -ON FORCE 拔出力度	MEASUREMENT SHALL BE MADE AFTER CONNECTING AI DISCONNECTING USING STANDARD PLUG GAUGE 3 TIMES 依据标准的 PLUG GAUGE 做第 3 次拔插后测定				
2	TERMINAL STRENGTH 端子强度	A STATIC LOAD OF 0.1N/m(1kgf/cm)SHALL BE APPLIED TO TT TIP OF THE TERMINAL FOR 1 MIN IN ANY DIRECTION 向排脚先端的任意一个方向加 1 分钟 5N/(0.5kgf)的力度.	THERE SHALL BE NO DAMAGE TO THE TERMINAL SUCH AS CRACKS, LOOSENESS OR PLAY ELECTRICAL, AND MECHANICAL CHARACTERISTICS SHALL BE SATISFIED 在排脚中没有裂开、松动等异常,满足 于机械、电气性能			
ELE	CTRICAL(电气性	能)				
	ITEM 项目	TEST CONDITIONS 测试条件	PERFORMANCE 规格			
3.1	CONTACT RESISTANCE 接触电阻	MEASURED AT SMALL CURRENT (100m A OR LESS) 1000Hz 在微小电流(100 m A)以下测试	≪0.03 Ω			
3.2	INSULATION RESISTANCE 绝缘电阻	APPLY A VOLTAGE OF 500V DC FOR 1 MIN TO FOLLOWING PORTIONS AFTER WHICH MEASUREMENT SHALL BE MADE: (1) BETWEEN BODY AND CONDUCTOR (2) BETWEEN CONDUCTORS NOT TO BE CONTACT (3) BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTED DC 500V 1 MIN 输入 500V DC 电压 1 分钟,按以下接触方法测试: (1) 插座体与排脚之间 (2) 不接触的排脚之间 (3) 插头插入时不接触排脚之间	≥100MΩ			

		JI LOII ICATION	
3.3	DIELECTRIC STRENGTH 耐电压	AC 500V ims(50~60Hz)FOR 1 MIN TRIP CURRENT:0.5mA (1) BETWEEN BODY AND CONDUCTOR (2) BETWEEN CONDUCTORS NOT TO BE CONTACT (3) BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTED DC 500V 1 MIN 输入 AC 500V (50Hz)/min 电压 1 分钟感度电流为 0.5mA, 按以下接触方法测试: (1) 插座体与排脚之间 (2) 不接触的排脚之间 (3) 插头插入时不接触排脚之间	WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC 没有绝缘破坏等异常
URAB	ILITY(耐久性)		
	ITEM 项目	TEST CONDITIONS 测试条件	PERFORMANCE 规格
4.1	SOLDERA- BILITY TEST 可焊性试验	THE TOP OF THE TERMINALS SHALL BE DIPPED 1mm IN THE SOLDER BATH OF 240±5℃ FOR 3±0.5 SECONDS 端子顶部被浸入锡池中 1mm 深,温度为 240±5℃,时间为 3 ±0.5 秒	 (1) SOLDER WETTING TIME SHALL BE 3 SEC OR LESS 焊接时间应少于 3 秒 (2) THE AREA OF SOLDERING SHOULD BE OVER 95% 焊接面积应有 95%以上
4.2	RESISTANCE TO SOLDERING HEAT TEST 耐焊性试验	SOLDERING IRON METHOD: BIT TEMPERATURE 330±5℃ APPLICATION TIME OF SOLDERING IRON3±0.5 SEC HOWEVER EXCESSIVE PRESSURE SHALL NOT BE APPLIED TO THE TERMINAL 手焊接的时候温度需控制在 330±5℃ ,时间 为 3±0.5 秒,但不能在排脚上施加异常压力。	WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TEMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED 本体无变形,满足于机械、电气性能
4.3	HUMIDITY TEST 潮湿试验	THE JACK SHALL BE STORED AT A TEMPERATURE OF 40±2℃ AND A HUMIDITY OF 90%TO 96% FOR 96 Hr,THEN THE JACK SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 Hr FOR OTHER PROCEDURES 放置 40±2℃ 的相应湿度为 90~96% Hr 环境中 96 小时后, 再将样板放在正常环境中 1 小时后进行测试	THERE SHALL BE NO DAMAGE ON APPEARANCE。 MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE
4.4	HEAT TEST 耐热试验	THE JACK SHALL BE STORED AT A TEMPERATURE OF70±2℃ FOR 96 HOURS, AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY MBASURBM 放置在温度 70±2℃中测试 96 小时后,再放置正常室温中 1 小时来测定	SATISFIED 外观无异常,满足于机械、电气性能。

4.5	COLD TEST 耐寒试验	THE JACK SHALL BE STORED AT A TEMPERATURE OF-25±3℃ FOR 96 HOURS AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH 放置在温度-25±3℃中 96 小时后,再放置常温常湿中 1 小 时来测定	THERE SHALL BE NO DAMAGE ON APPEARANCE MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED 外观无异常,满足于机械、电气性能
4.6	LIFE TEST 寿命试验	WITHOUT LOAD CONNECTION AND DISCONNECTION SHALL BE MADE WITH THE MATING PLUGS AND JACKS FOR 5,000 CYCLES AT A SPEED OF 10 TO 25 CYCLES/MIN 无负荷 将结合了的标准 Plug(尽量要近于中心的)在 1 分钟内以 10~25 的速度,进行 5,000 次 插入,拔出 LOAD: AT RATING CONDITION (NON-INDUCTIVE LOAD) CONNECTION AND DISCONNECTION SHALL BE MADE 1,000 CYCLES AT A SPEED 10 TO 20 CYCLES / MIN 负荷 以定格状态(无诱导负荷)在 1 分钟内以 10~20 次的速度进行 1,000 次插入、拔出	 (1) CONTACT RESISTANCE SHALL BE ≤ 0.1 Ω (2) DISCONNECTION FORCE SHALL BE 3 TO 30N (3) MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED (1) 接触电阻≤0.1 Ω (2) 拔出力是 3~30N (3) 其它:满足于机械、电气性能
4.7	TEMPARATURE CYCLINGTEST 温度循环测试	THE JACK SHALL BE SUB JECTED TO 5 CYCLES OF THE FOLLOWING CONDITIONS SHOWED IN THE FIGURE, AND THEN SHALL RETURNED ALLOWED TO REMAIN IN ROOM AMBIENT CONDITION FOR 30 MINUTES 将插座以下列条件作 10 个循环, 然后放回室内环境 60 分 钟 Temp($^{\circ}$)	THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART. INSERTION & EXTRACTION FORCE:3 TO 30N CONTACT RESISTANCE: MAX.30M Ω INSULATION RESISTANCE: MIN.100 M Ω DIELECTRIC WITHSTANDING VOLTAGE: 500VAC/MIN(BETWEEN TERMINALS) 产品不能变形与破裂 插拔力: 3N 至 30N 接触电阻:最大 30m Ω 绝缘电阻:最大 100 M Ω 绝缘耐压:最小 500VAC (端子之间)

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ENVI	RONMENTAL (环境	性能)			
ITEM 项目		TEST CONDITIONS 测试条件	PERFORMANCE 规格		
4.8	SALT MIST TEST 盐雾测试	 TESTING BATH: THE TEMPERATURE SHALL 35℃±2℃ IN THE AMBIENT OF THE SPECIMEN DURING THE TEST。 SPRAY APPARAUS: THE APPARATUS SHALL CAPABLE OF PRODUCING FINE DENSE MIST UNIFORMLY。 SALT WATER: THE CONCENTRATION OF THE SALT WATER SHALL ADJUSTED AT 5±1% WEIGHT RATIO AT 35℃±2℃。 TESTING TIME 24±0.5HOURS。 AFTER WASHED IN WATER or THE SAMPLE SHALL LEFT ALONE FORIOR2HOURS IN A ROOM AMBIENT。 测试容器: 在测试过程中,产品周围环境温度 35℃±2℃。 喷雾设备:盐雾要均匀喷出。 盐水:盐水要在 35℃±2℃温度条件下,调整在 5±1% 比例范围内。 测试时间: 24±0.5 小时 清洗后,样品在室内要单独放置 1 至 2 个小时。 	APPEARANCE SHALL NOT EXTREMELY RUST.ANDCOMTACTING PORTIONS SHOULD SUCH THAT THEY WILL WORK WITHOUT HINDRANCE FOR PRACTICAL USE。 表面不能有严重的腐蚀,接触部分要不防碍正 常使用。		

		THE JACK SHALL BE SUBJECTED TO 6 CYCLES OF	THERE SHALL BE NO DEFORMATION OR
		THE FOLLOWING CONDITIONS SHOWED IN THE	CRACKS IN MOLDED PART.
		FIGURE,AND THEN SHALL RETURNED AND	INSERTION & EXTRACTION FORCE:3 TO 30N
		ALLOWED	CONTACT RESISTANCE:MAX.30M Ω
		TO REMAIN IN ROOM AMBIENT CONDITION FOR	INSULATION RESISTANCE: MIN.100 M Ω
		30 MINUTES	DIELECTRIC WITHSTANDING VOLTAGE:
4.9		将插座以下列条件作 5 个循环, 然后放回室内环境 30 分钟	500VAC/MIN(BETWEEN TERMINALS)
4.9	HEAT SHOCK	TEMP (°C)	
	TEST		产品不能变形与破裂
	热冲击测试	↑	插拔力: 3N 至 30N
		1 cycle	接触电阻:最大 30m Ω
		← →	绝缘电阻:最小100 MΩ
		60	绝缘耐压:最小 500VAC (端子之间)
		-10	
		Time(hour)	
		0 0.5 1 1.5 2	
L			